



Congress Abstract

Clinical, Endoscopic, and Morphological Dissociation of Uremic Gastropathy in Patients Receiving Programmed Hemodialysis

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ABSTRACT

Background: Gastroduodenal lesions in patients with end-stage chronic kidney disease often present with nonspecific clinical manifestations. Standard esophagogastroduodenoscopy allows for the detection of macroscopic changes in the gastric mucosa; however, its ability to reflect the severity of chronic inflammation and structural changes in the stomach in hemodialysis patients has been poorly studied.

Aim of the study: To evaluate the correlation between clinical manifestations, endoscopic findings, and morphological changes in the gastric mucosa in patients with end-stage chronic kidney disease receiving programmatic hemodialysis.

Materials and Methods: This prospective comparative study included 92 patients with stage V chronic kidney disease who had been receiving hemodialysis for at least 6 months and had dyspeptic symptoms, as well as 60 patients with preserved renal function who were examined for dyspepsia. The groups were matched for gender and age. All participants underwent esophagogastroduodenoscopy with biopsy of the antral and corpus mucosa. Histological examination assessed chronic inflammation, disease activity, atrophy, and the presence of *Helicobacter pylori*.

Results: The clinical presentation in hemodialysis patients was dominated by episodic epigastric pain (61.9%), bloating (58.7%), and nausea (46.7%). Persistent epigastric pain and vomiting were significantly more common than in patients with preserved renal function ($p=0.041$ and $p=0.008$, respectively). However, the pattern of complaints remained nonspecific and did not allow us to determine the nature of the structural damage to the mucosa.

Endoscopically, gastritis was detected in 51.1% of patients on program hemodialysis and in 58.3% of patients in the comparison group; no statistically significant difference was found between the groups. Thus, the visual endoscopic picture did not reflect the more severe nature of mucosal damage in end-stage renal failure.

Fundamental differences were revealed by morphological examination. Atrophy of the gastric body mucosa was diagnosed in 34.8% of hemodialysis patients, significantly exceeding the rate in the comparison group ($p=0.009$). In patients with preserved renal function, active superficial inflammation without significant structural changes in the mucosa predominated. Atrophic changes in dialysis patients were associated with a longer duration of renal replacement therapy ($p<0.001$) and more pronounced acid-base imbalances ($p=0.013$). The detection rate of *H. pylori* in the corpus and antrum of the stomach was 48.9% and 57.6%, respectively, and did not differ significantly from the comparison group. Therefore, the observed morphological dissociation could not be explained solely by differences in the prevalence of infection.

Conclusion: In patients on program hemodialysis, the severity of morphological damage to the gastric mucosa does not correspond to the severity of dyspeptic symptoms and the standard endoscopic picture. A comparable frequency of endoscopically diagnosed gastritis with a significantly higher prevalence of atrophy indicates a systematic underestimation of uremic gastropathy when using visual EGDS alone. Biopsy of the corpus and antrum of the stomach should be considered a mandatory component of the evaluation of patients with a long history of dialysis, regardless of the severity of complaints and the macroscopic picture.

Keywords: Gastropathy; Hemodialysis

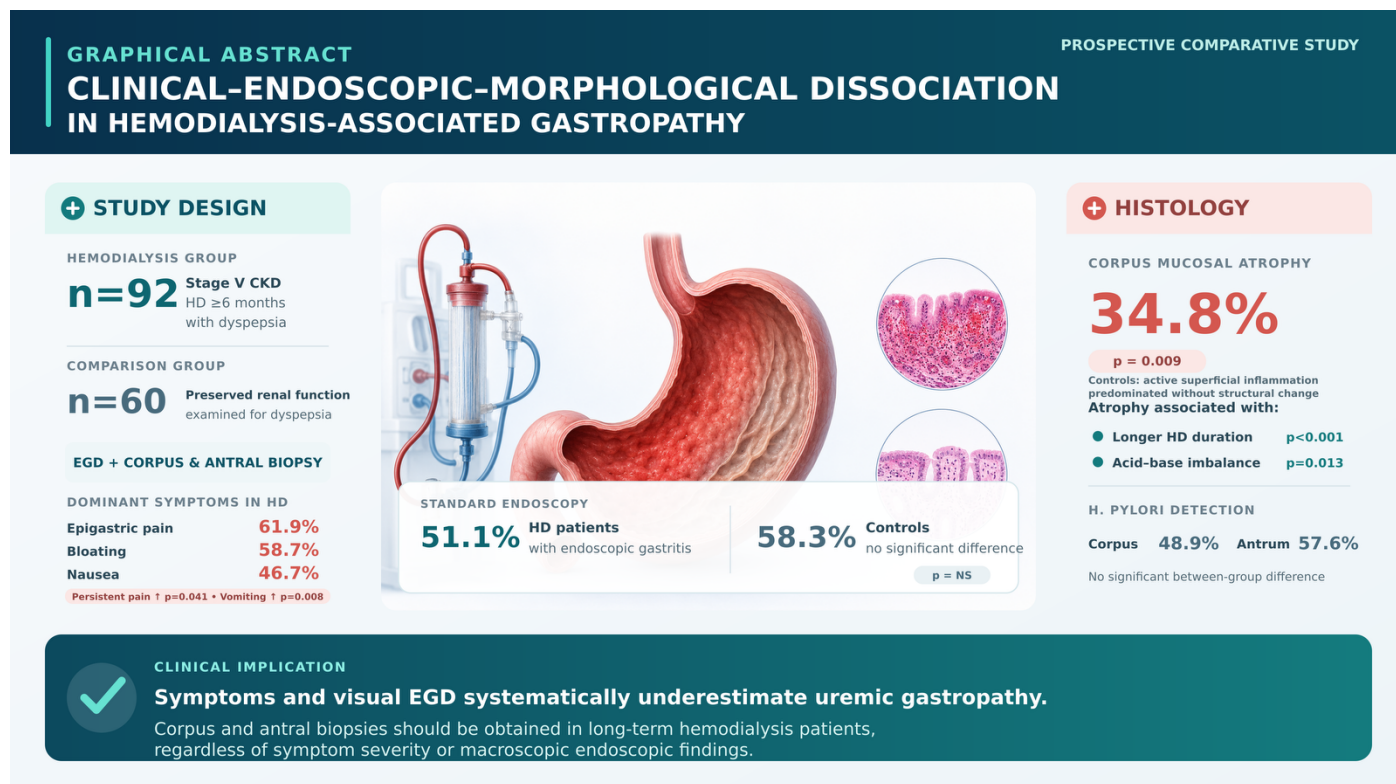


Figure 1: Clinical, endoscopic, and morphological dissociation of uremic gastropathy in patients receiving programmed hemodialysis.